

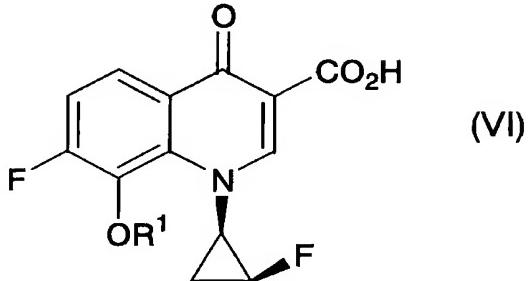
DISCUSSION OF THE CLAIMS

Claims 1-18 are pending in the present application. Claims 5-8 are presently withdrawn from active prosecution. Claims 9-18 are new claims. Support for new Claim 9 is found in original Claim 1. Support for new Claim 10 is found on page 10 [0042]. Support for new Claim 11 is found on page 10 [0041]. Support for new Claim 12 is found in the first full paragraph on page 11. Support for new Claims 13 and 14 is found in the paragraph bridging pages 12 and 13. Support for new Claim 15 is found on page 12 [0050]. Support for new Claim 16 is found on page 14 [0054]. Support for new Claim 17 is found on page 15 [0056]. Support for new Claim 18 is found in the reaction scheme on page 17 of the specification.

No new matter is added.

REMARKS

Present Claim 1 is drawn to a method for producing a compound of the following formula (VI):

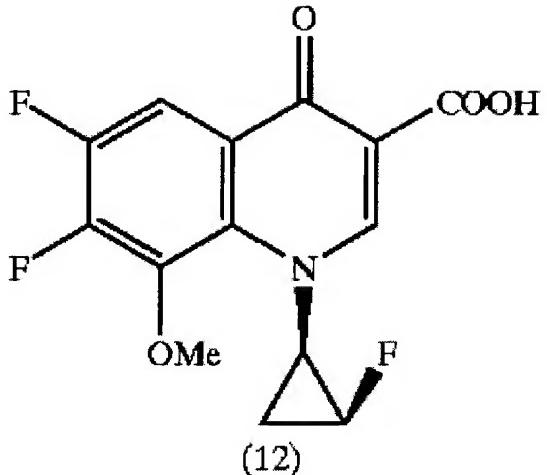


The compound of formula (VI) of Claim 1 has a quinoline-type skeleton. The quinoline-type skeleton of the compound of formula (VI) is directly substituted with only a single F (fluorine) atom. In the process of forming the compound of formula (VI) of Claim 1 the benzene-type aromatic group of the quinoline-type skeleton or a precursor of the quinoline-type skeleton may be substituted by two F atoms (see for example the compound of formula (IV)). However, when the compound of formula (IV) is subjected to treatment with a base, one of the F atoms is eliminated to thereby form the quinoline-type skeleton.

Importantly, the quinoline-type skeleton of the compound of formula (VI) does not contain more than one directly bonded F atom.

The Office asserts that the method of Claim 1 is anticipated by one or more of Takemura '225 (U.S. 6,900,225) or Takemura '757 (U.S. 5,849,757). Applicants traverse the rejection on the grounds that the art cited by the Office does not disclose a process for forming the compound of formula (VI) in the manner set forth in present Claim 1.

For example, the Office cites to column 8 as evidence that Takemura '225 discloses a reaction scheme that anticipates the method of present Claim 1. Applicants submit that this is not correct. The reaction scheme depicted in column 8 of Takemura '225 produces a compound of formula (12), shown below for convenience:



It is readily evident that the compound of formula (12) is different from the compound of formula (VI) of present Claim 1. The Takemura '225 compound includes a quinoline-type skeleton that is directly substituted with two F atoms. Importantly, it is not only the compound of formula (12) of Takemura '225 that has such a pattern of dual fluorine substitution. The intermediate compounds of formulas (8)-(12) do so as well.

Applicants submit that the reaction scheme of column 8 of Takemura '225 describes a reaction process that is different from the reaction process of present Claim 1 at least because the benzene-type portion of a quinoline-type skeleton and/or the benzene portion of any quinoline-precursor has a pattern of fluorine substitution that is different from the fluorine substitution of the compounds of formula (VI), (IV), and (V) of present Claim 1.

Applicants request withdrawal of the rejection.

With respect to Takemura '757, Applicants likewise submit that the art cited by the Office does not disclose a method for forming the compound of formula (VI) of present Claim 1 in the manner recited in the present claims. The Office cites to the reaction scheme in column 23 of Takemura '757 as evidence that this reference anticipates the presently claimed invention.

Applicants submit that the Office is not correct for several reasons. First, as discussed above for Takemura '225, the final product of the reaction scheme of column 23 of Takemura

‘757 has a pattern of F atom substitution on a benzene portion of a quinoline-type skeleton that is different from that of the present claims; namely, the Takemura ‘757 product is substituted with two fluorine atoms on the benzene portion of a quinoline skeleton.

Second, the benzene portion of the quinoline-type structure and/or any precursor of a quinoline-type structure is not substituted with an alkoxy group such as the OR<sup>1</sup> alkoxy group of compound (VI), (IV), and (V) of present Claim 1. Instead, in Takemura ‘757 this position is taken by a Me (methyl) group. Applicants submit that those of ordinary skill in the art readily recognize that a methyl group is substantially different than a methoxide group.

Third, some of the quinoline-type skeleton precursors and the final product of the reaction scheme of column 23 of Takemura ‘757 are further substituted with a nitrogen atom-based unit. For example, the final product of the Takemura ‘757 reaction scheme is substituted with a -NH<sub>2</sub> in the benzene portion of the quinoline-type skeleton. The precursors of this amine group-substituted quinoline-type skeleton is a nitro group-substituted (-NO<sub>2</sub>) compound. In contrast, the corresponding position of the quinoline-type structure of the compounds of formula (VI), (IV), and (V) of present Claim 1 are substituted with a hydrogen atom. Applicants submit that it is readily recognized that a hydrogen atom and a nitro group are substantially different chemical moieties.

Applicants thus submit that the art relied on by the Office to reject the claims as anticipated does not disclose the presently claimed invention. The rejection is thus legally and factually unsupportable and should be withdrawn. Applicants respectfully request withdrawal of the rejection and the allowance of all now-pending active claims.

Applicants thank Examiner Seaman for the helpful and courteous discussion of April 15, 2009. During the discussion, Applicants’ U.S. representative pointed out that the product of Claim 1 of the present application has a quinoline-type structure that is substituted

in a manner that is different from any quinoline-type structure of any product or intermediate described in the art cited by the Office. The Examiner appeared to agree and indicated that the anticipation rejection would be withdrawn.

**INFORMATION DISCLOSURE STATEMENT**

Applicants request the Office acknowledge consideration of the references cited in the IDS submitted in the present case on March 10, 2009.

Respectfully submitted,

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